

ARCHITECTURE 201
FUNDAMENTALS OF ARCHITECTURAL DESIGN

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PROJECT NO. 2: "AN EGALITARIAN ESCAPE"

PROJECT LEARNING OBJECTIVES:

1. To continue to use and develop further understanding of the basic design elements of point, line, plane and volume and their application in developing geometric order and spatial definition.
 2. To consider the relationship between human factors and needs, spatial relationships, climatic parameters and fundamental building techniques.
 3. To continue to develop and refine methods of problem analysis and eventual communication of design decisions.
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PROJECT PREMISE: A FABLE:

In the hub-bub of the late 20th Century, amidst the pressures of the "cover your backside bureaucracy" and the cunning of the "cost-effective" consciousness of neo-capitalism, there breathes a spirit. Alive and well in the hearts of a few stout souls lives the idea of "Liberte! Egalite! Fraternite!"

These souls need a place of retreat, a place to share with others of like mind and heart their essential freedom, a place in which to be an equal amongst equals; a place without hierarchy, authority or pretense. To this end they have formed an association, an organization without an organization, a group where leadership is service and carries no prestige, no special honor, no reward except the appreciation of the group for a job well done.

The association, now named the "Egalitarians" (and not to be confused with Rotarians, Kiwanians, Elks, Junior Leaguers or any other manifestation of the "elite") has no banner, no heraldic trappings, no mystical chants or secret handshakes. This association simply is! The character of the group is defined by the participants: ever changing, ever evolving toward their ideals. Meeting and sharing an egalitarian experience is an essential aspect of their existence. The philosophy attracts. The association grows. Across the nation, new groups coalesce. New meeting places are needed.

You are asked to design a prototypical facility for an Egalitarian Escape. Land has been acquired in several regions of the country. The sites are remote, peaceful, natural and, if treated sensitively, are able to accommodate the facilities of the peaceful Egalitarians.

The concept of the Escape has been reviewed by all the groups and a program has formed by mutual discussion and agreement. Each site will have a "Commons," consisting of facilities for cooking, hygiene, storage and medical aid. The Commons will be a "servant facility," and thus ancillary

to a scattered series of "Constellation Units," which, in clusters or individually, are the "Egalitarian Escapes." The smallest one of the individual units is your design task.

"Constellation 5," as this smallest Egalitarian Escape unit has been termed, is a place for five (5) persons to escape, to retreat, to meet, to eat, to sleep, to be alone or with others, to be at rest or at work on ideas. Within its constellation, and at a distance from the Commons, Constellation 5 is a place among places.

PROJECT PROGRAM SPECIFICS:

The Egalitarians desire a facility that supports fraternity, equality and the liberty of the individual. To them this means a unity of space and form expression with the potential for a diversity of uses. They want the exterior form to reflect these characteristics and qualities, too.

To clarify their needs, the Egalitarians give you a list of their space requirements and other information from their own investigations:

1. Constellation 5 shall have:
 - a) Individual Spaces: 5 Equal Spaces for sleeping, dressing, resting, being alone; size to be determined by the designer; visual privacy mandatory.
 - b) Group Space: 1 Large Space for group activity: meeting, eating, working together collectively or in groups of two or three. The space must provide for a few visitors. Food will be delivered to the unit from the central Commons kitchen, and will be warm- and served in Constellation 5.
2. It is critical that Constellation 5 be designed in several configurations corresponding to different sites in three different climatic zones, while retaining the qualities desired in terms of function and spirit.

The three climatic zones are:

 - a) Hot-Arid (near Phoenix, Arizona)
 - b) Cool-Temperate (near Madison, Wisconsin)
 - c) Warm-Wet (near Houston, Texas)

(In each section, one third of you will design for each of the zones, resulting in a variety of solutions for each zone in each design section)
3. The ground floor area shall not exceed 576 square feet.
4. The total enclosed volume shall not exceed 13,824 cubic feet.
5. In response to anticipated climatic conditions in each zone, a "plan ratio" is established:
 - a) Hot-Arid: 1:1 (24' x 24' ±)
 - b) Cool-Temperate: 1:1.5 (20 x 28' ±)
 - c) Warm-Wet: 1:2 (16.7' x 34' ±)
6. The plan form shall be orthogonal (90° angles) with any departures from the orthogonal occurring only in the roof planes.
7. Regardless of their climatic zone, the Constellation 5 designs shall be of wood construction with consideration given to modular coordination typical of wood systems: 2' intervals for lumber lengths; 4' x 8' modules for sheet materials, and nominal dimensions for dressed lumber.

8. Circulation to upper levels shall be by ship's ladders or vertical ladders.
9. The Egalitarians wish to avoid active means of environmental control and remind you that orientation, openings and roof forms are major elements for achieving appropriate climatic response by passive means.

EVALUATION CRITERIA: EQUAL WEIGHT WILL BE GIVEN TO THE FOLLOWING:

1. Concept: The spirit and sense of place.
2. Idea Development: Three-dimensional space relationships and functional organization.
3. Technics: Climatic response, system geometry, and system structure.
4. Communication: Model craft, and verbal presentation and dialogue.

REFERENCE:

U.S. Department of Housing and Urban Development, Office of Policy Development and Research in cooperation with the U.S. Department of Energy. Regional Guidelines for Building Passive Energy Conserving Homes. 1978.